

movement of the gear select lever from a first position to a second position switches the speed modification switch from the first state to the second state and changes the gear ratio; and

an engine control circuit for controlling the speed of said engine, wherein the engine control circuit is connected to receive input from the throttle control switch and the speed modification switch;

said engine control circuit being responsive to input from said throttle control switch and said speed modification switch for selectively controlling said engine to run at a first speed for a given position of said throttle control when said speed modification switch is in said first state and to run at a second speed higher than said first speed when said throttle control is in said given position and said speed modification switch is in said second state.

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2. (Not amended) A combine harvester as claimed in claim 1 wherein said engine control circuit comprises a programmable microprocessor.

3. (Not amended) A combine harvester as claimed in claim 1 wherein said engine control circuit comprises a programmable microprocessor having:

means for storing a first table holding work speed values, one work speed value corresponding to each position of said throttle control, and a second table holding at least one road speed value greater than any of said work speed values;

means for accessing a work speed value from said first table when said speed modification switch is in said first state and accessing a road speed value from said second table when said speed modification switch is in said second state; and,

means responsive to an accessed a work speed value or road speed value for producing an output signal to control said engine to run at the speed represented by said accessed work speed value or accessed road speed value.

4. (Not amended) A combine harvester as claimed in claim 3 wherein said table of road speed values includes a road speed value corresponding to each position of said throttle control, the road speed value corresponding to a given position of said throttle control being greater than the work speed value corresponding to said given position of said throttle control whereby, for each position of said throttle control, said engine may be selectively controlled to run at a first speed or a second speed higher than said first speed, depending on the state of said speed modification switch.

5. (Not amended) A combine harvester as claimed in claim 3 wherein said output signal controls the rate of fuel flow to said engine.

6. (Not amended) A combine harvester as claimed in 3, further comprising other harvester components including, a threshing, cleaning and separation system powered by said engine, said work speed values being chosen so the output power of said engine does not overload said other harvester components.